



PROJECT COMPLETED TO IMPROVE FOUNTAIN CREEK

Southern Delivery System Fact Sheet



Construction was completed in May 2014 on a project designed to restore a section of Fountain Creek to a more natural state and reduce erosion and sedimentation. The Fountain Creek Improvement Project, located on Clear Spring Ranch near Fountain, is a \$4.2 million construction project that fulfills a mitigation commitment for the Southern Delivery System (SDS) project. The work was done on city property to minimize impacts to neighboring property owners.

The total area that was enhanced includes approximately 20 acres of land and about one-half mile of creek.

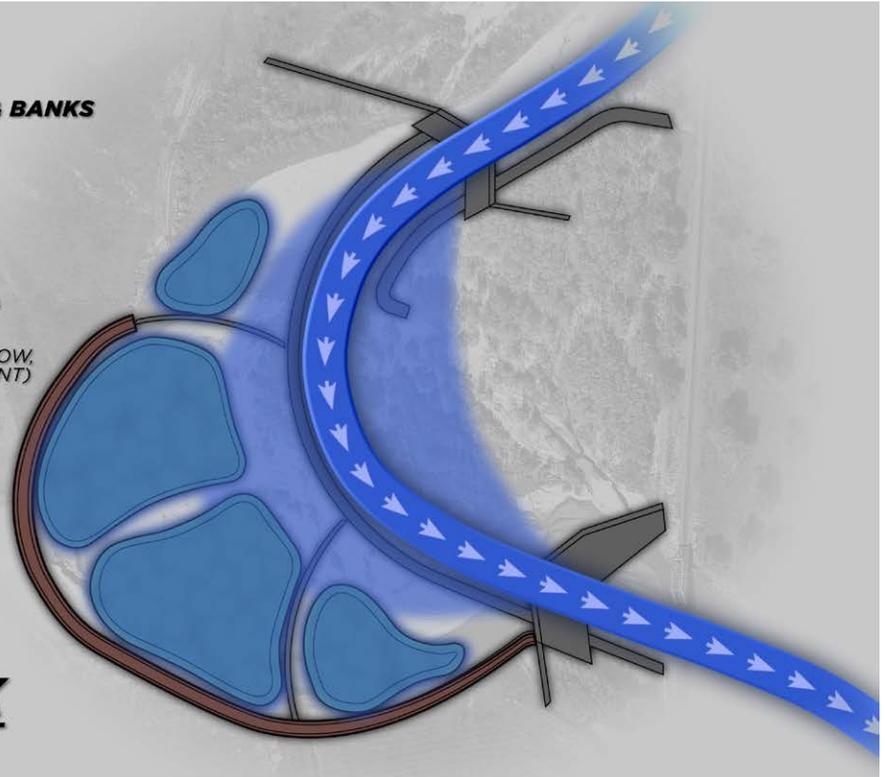
Over the years, multiple factors contributed to instability in the creek's natural flow pattern, causing bank erosion.



- 1. CREEK REALIGNMENT**
(RESTORING NATURAL CREEK PATTERN)
- 2. GRADING/TERRACING OF CHANNEL & BANKS**
(EROSION AND SEDIMENT CONTROL)
- 3. CHANNEL GRADE CONTROL**
(CONSTRUCTED OF BURIED, COMPACTED ROCK TO RESTORE NATURAL CREEK PROFILES AND PROVIDE FISH PASSAGE)
- 4. BURIED KEYWAYS**
(PREVENTS WATER IN CHANNEL FROM BYPASSING GRADE CONTROL STRUCTURES)
- 5. FLOOD PLAIN/WETLAND CREATION**
(REDUCES SPEED AND FORCE OF STORM FLOW, FURTHER REDUCING EROSION AND SEDIMENT)
- 6. REVEGETATE WITH NATIVE PLANTS**
(SLOWS WATER, IMPROVES WATER QUALITY AND PROVIDES HABITAT FOR WILDLIFE)
- 7. PROJECT MANAGES WATER FLOWS DURING STORM EVENTS**



FOUNTAIN CREEK IMPROVEMENT PROJECT



SDS contractors took a number of steps in this area to restore the creek.

- Realigned the creek and restored the natural flow pattern by moving the creek banks back to the east.
- Graded and terraced the channel and banks to help control erosion and sedimentation.
- Built grade control structures of buried, compacted rock to slow creek flows and allow fish to pass.
- Installed keyway structures to help prevent the creek water from bypassing the new control structures.
- Created a new floodplain and wetlands; cottonwood and willow saplings from the ranch were planted there. Also, dead cottonwoods salvaged from the creek bed were incorporated along creek banks to enhance wildlife habitat.
- All of these measures are helping manage water flows during storm events, by slowing the water, reducing its force and allowing it to flow naturally in the flood plain and new wetlands.

Bank instability is common along creeks so this project could serve as a valuable pilot for effective ways to improve wildlife habitat and improve water quality.

To view an animated graphic of the project, please visit the [SDS website](#).

